

**GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION NO. 2975
ANSWERED ON 06/08/2025**

IMPLEMENTATION STATUS OF VAJRA SCHEME

2975. SHRI DAGGUMALLA PRASADA RAO:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) the details of the number of faculty and scholars that have participated Visiting Advanced Joint Research (VAJRA) scheme till date, State, years and gender-wise;**
- (b) the list of academic institutions in India and abroad participating under the scheme;**
- (c) the quantum of funds allocated, released and utilised under this scheme to participating faculty, institute-wise;**
- (d) the details of the number of research projects initiated and successfully completed under this scheme, institute-wise;**
- (e) whether any outreach programs were conducted in foreign diaspora hubs for promoting collaborating research under VAJRA scheme, if so, the details thereof, Country-wise; and**
- (f) whether the Government maintains the data of the number of patents/start-ups generated from VAJRA projects and if so, the details thereof, State-wise?**

ANSWER

**MINISTER OF STATE (INDEPENDENT CHARGE) OF THE
MINISTRY OF SCIENCE AND TECHNOLOGY AND EARTH SCIENCES
(DR. JITENDRA SINGH)**

विज्ञान और प्रौद्योगिकी तथा पृथ्वी विज्ञान मंत्रालय के राज्य मंत्री (स्वतंत्र प्रभार)
(डॉ. जितेंद्र सिंह)

- (a) The state, year and gender-wise details of the number of VAJRA faculties that have participated in Visiting Advanced Joint Research (VAJRA) scheme till date is given below:-**

Year - 2017-18		
State	No. of VAJRA projects Sanctioned	Gender (Male/Female)
Karnataka	2	Male - 2
Gujarat	1	Male - 1
Maharashtra	2	Male - 1, Female - 1
Madhya Pradesh	1	Male - 1
New Delhi	1	Male - 1
Year 2018-19		
Gujarat	1	Female - 1
Karnataka	4	Male - 3, Female - 1
Kerala	2	Male - 1
Madhya Pradesh	1	Male - 1
Maharashtra	2	Male - 2
New Delhi	2	Male - 2
Punjab	1	Male - 1
Tamil Nadu	12	Male - 9, Female - 3
Telangana	2	Male - 2
Uttar Pradesh	5	Male - 3, Female - 2
West Bengal	1	Male - 1
Year 2019-20		
Karnataka	2	Male - 2
Maharashtra	2	Male - 2
West Bengal	1	Male - 1
Telangana	1	Male - 1
Year 2020-21		
Tamil Nadu	2	Male - 1, Female - 1
Year 2021-22		
Karnataka	3	Male - 3
Maharashtra	1	Male - 1
New Delhi	6	Male - 5, Female - 1
Odisha	2	Male - 1, Female - 1
Tamil Nadu	2	Male - 2
Telangana	2	Male - 1, Female - 1
Uttarakhand	2	Male - 1, Female - 1

Year 2022-23		
State	No. of VAJRA projects Sanctioned	Gender (Male/Female)
Karnataka	1	Male – 1
Kerala	1	Male – 1
Madhya Pradesh	2	Female - 2
Maharashtra	4	Male – 4
New Delhi	3	Male – 3
Punjab	1	Male – 1
Tamil Nadu	1	Male – 1
Uttar Pradesh	4	Male – 4
West Bengal	1	Female - 1
Year 2023-24		
Tamil Nadu	1	Male - 1
Assam	1	Male – 1
Maharashtra	1	Male – 1
Gujarat	1	Male - 1
Year 2024-25		
Tamil Nadu	1	Male – 1
Uttarakhand	1	Female - 1
Maharashtra	1	Male – 1
Assam	1	Male – 1
Karnataka	4	Male – 4
Uttar Pradesh	3	Male – 3
Haryana	1	Male – 1
Goa	1	Male – 1
West Bengal	1	Male – 1
Kerala	1	Male - 1
Year 2025-26		
Punjab	1	Male - 1

(b) The list of academic institutions in India and abroad participating under the scheme is given below:-

i. List of Indian Institutes participating under the scheme

S. No.	Institute
1.	Indian Institute of Technology Madras
2.	Indian Institute of Science, Bengaluru
3.	Indian Institute of Technology Bombay
4.	Indian Institute of Technology Delhi
5.	National Centre for Biological Sciences, Bengaluru
6.	Tata Institute of Fundamental Research, Mumbai
7.	Raman Research Institute, Bengaluru
8.	Indian Institute of Technology Kanpur
9.	Indian Institute of Technology BHU
10.	Indian Institute of Technology Gandhinagar
11.	Indian Institute of Technology Hyderabad
12.	Indian Institute of Technology Indore
13.	Indian Institute of Technology Kharagpur
14.	Indian Institute of Technology Ropar
15.	Indian Statistical Institute, Bengaluru
16.	Institute of Mathematical Sciences, Chennai
17.	International Institute of Information Technology Hyderabad
18.	Cochin University of Science & Technology
19.	S N Bose National Centre for Basic Sciences, Kolkata
20.	Sree Chitra Tirunal Institute for Medical Sciences & Technology
21.	Indian Institute of Science Education and Research Pune
22.	Indian Institute of Technology Bhubaneswar
23.	Harish-Chandra Research Institute
24.	Inter-University Accelerator Centre, New Delhi
25.	Punjabi University

S. No.	Institute
26.	National Institute of Ocean Technology
27.	National Institute of Technology, Silchar
28.	University of Delhi, South Campus
29.	International Centre for Theoretical Sciences, TIFR
30.	Indian Institute of Technology Roorkee
31.	Institute of Life Sciences
32.	Central University of Kerala
33.	Aryabhata Research Institute of Observational Sciences (ARIES), Nainital
34.	National Institute of Oceanography, Goa
35.	Choudhary Charan Singh Haryana Agricultural University, Hisar
36.	Centre for Nano and Soft matter sciences (CeNS), Bengaluru
37.	Bose Institute, Kolkata
38.	National Institute of Technology Calicut
39.	Jawaharlal Nehru Centre for Advanced Scientific Research, Bengaluru

ii. List of Overseas Institutes participating under the scheme

S No	Institute Name	Country
1.	Steklov Institute of Mathematics	Russia
2.	Queensland University of Technology	Australia
3.	Arizona State University	USA
4.	Seoul National University	South Korea
5.	Michigan Technological University	USA
6.	Ohio State University	USA
7.	Sheffield University	United Kingdom

S No	Institute Name	Country
8.	University of Milan	Italy
9.	University of North Carolina and North Carolina State University	USA
10.	Pennsylvania State University	USA
11.	Swinburne University of Technology	Australia
12.	Georgia Institute of Technology	USA
13.	Virginia Commonwealth University	USA
14.	Texas A&M University	USA
15.	University of Kentucky	USA
16.	Rice University	USA
17.	Washington University in St. Louis	USA
18.	University of Houston	USA
19.	Swansea University	United Kingdom
20.	National University of Singapore	Singapore
21.	University Paris-Est Marne-La-Vallée France	France
22.	University of Southern California	USA
23.	University of Toronto	Canada
24.	Missouri University of Science and Technology (MST)	USA
25.	Drexel University	USA
26.	University of Calgary	Canada
27.	Universite Pierre et Marie Curie, Paris	France
28.	University of Illinois at Urbana-Champaign	USA

S No	Institute Name	Country
29.	Michigan State University	USA
30.	Purdue University	USA
31.	University of Melbourne	Australia
32.	RMIT University	Australia
33.	Pontificia Universidad Católica de Chile	Chile
34.	University of Surrey Guildford	United Kingdom
35.	Dublin City University	Ireland
36.	Monash University	Australia
37.	Universite Paris-Sud	France
38.	Massachusetts Institute of Technology	USA
39.	Trinity College	Ireland
40.	Weizmann Institute of Science	Israel
41.	State University of Sao Paulo (Unesp)	Brazil
42.	University California, San Diego	USA
43.	University Of Rhode Island	USA
44.	Gsi Gmbh, Darmstadt	Germany
45.	University Of Cape Town	South Africa
46.	Tu Dresden	Germany
47.	Oklahoma State University	USA
48.	University Of Notre-dame	USA
49.	Tufts University	USA
50.	University of Massachusetts Dartmouth	USA

S No	Institute Name	Country
51.	Utrecht University	Netherlands
52.	University at Buffalo	USA
53.	University Of Nebraska-lincoln	USA
54.	University of New Mexico	USA
55.	University of Missouri	USA
56.	University of Oslo	Norway
57.	Universität Bayreuth	Germany
58.	University of Birmingham	United Kingdom
59.	Technische Universität Darmstadt	Germany
60.	University of South Carolina	USA
61.	Aix-Marseille Université, Institut Fresnel, Ecole CentraleMarseille	France
62.	University of Gothenburg	Sweden
63.	Natural History Museum	United Kingdom
64.	Louisiana State University	USA
65.	Technical University of Dortmund	Germany
66.	Technion-Israel Institute of Technology	Israel
67.	Brookhaven National Laboratory	USA
68.	Technical University Munich	Germany
69.	CNR - Institute for Complex Systems	Italy
70.	University Of Illinois at Chicago	USA
71.	Helmholtzzentrum Muenchen	Germany
72.	National University of Singapore	Singapore

S No	Institute Name	Country
73.	University of Tokyo	Japan
74.	University of New South Wales	Australia
75.	California State University	USA
76.	University of California, Los Angeles	USA
77.	Ecole Normale Supérieure- Cachan	France
78.	Université de Liège	Belgium
79.	University of California, Davis	USA
80.	New Jersey Institute of Technology	USA
81.	Kyushu University	Japan
82.	Center for Genetic Regulation (CRG)	Spain
83.	La Trobe University	Canada
84.	Aberystwyth University	United Kingdom
85.	Institut de Physique du Globe de Paris	France
86.	University Of Kansas Medical Center	USA
87.	University of Potsdam	Germany
88.	JP Morgan & Chase	USA
89.	Lehigh University	USA
90.	University of Stuttgart	Germany

(c) The duration of engagement for “VAJRA Faculty” was limited to a maximum of three months per year. The program provided financial support of USD 15,000 in the first month of residence, followed by USD 10,000 for each subsequent month. In addition, a contingency grant of ₹5.0 lakh per year was made available per VAJRA faculty for the research-related expenses during their visit to the host

institution. No separate support was provided for travel, accommodation, medical / personal insurance etc.”

The Indian Collaborator was provided financial assistance to cover the expenses related to collaborative research activities. Additionally, ₹1.0 lakh was allocated to support the engagement of the VAJRA faculty in delivering lectures at the host institute, aligned with their area of expertise.

The details of quantum of funds released and utilised under this scheme to participating faculty, institute-wise is given below:-

S. No.	Institute	Funds released (amount in crores)	Funds utilised (amount in crores)
1.	Indian Institute of Technology Madras	3.88	3.17
2.	Indian Institute of Science	2.43	1.70
3.	Indian Institute of Technology Bombay	1.60	0.82
4.	Indian Institute of Technology Delhi	2.74	1.83
5.	National Centre for Biological Sciences	0.60	0.60
6.	Tata Institute of Fundamental Research, Mumbai	0.78	0.78
7.	Raman Research Institute, Bengaluru	0.65	0.55
8.	Indian Institute of Technology Kanpur	1.66	0.96
9.	Indian Institute of Technology, BHU	0.30	0.30
10.	Indian Institute of Technology, Gandhinagar	0.92	0.91
11.	Indian Institute of Technology, Hyderabad	1.33	1.02
12.	Indian Institute of Technology, Indore	0.60	0.60

S. No.	Institute	Funds released (amount in crores)	Funds utilised (amount in crores)
13.	Indian Institute of Technology Kharagpur	0.19	0.10
14.	Indian Institute of Technology, Ropar	0.34	0.20
15.	Indian Statistical Institute, Bangalore	0.24	0.24
16.	Institute of Mathematical Sciences	0.13	0.13
17.	International Institute of Information Technology Hyderabad	0.12	0.12
18.	Cochin University of Science & Technology	0.10	0.10
19.	S N Bose National Centre for Basic Sciences, Kolkata	0.74	0.53
20.	Sree Chitra Tirunal Institute for Medical Sciences & Technology	0.11	0.10
21.	Indian Institute of Science Education and Research Pune	0.72	0.48
22.	Indian Institute of Technology Bhubaneswar	0.62	0.30
23.	Harish-Chandra Research Institute	0.18	0.18
24.	Inter-University Accelerator Centre, New Delhi	0.91	0.87
25.	Punjabi University	0.47	0.32
26.	National Institute of Ocean Technology	0.31	0.14
27.	National Institute of Technology, Silchar	0.49	0.21
28.	University of Delhi, South Campus	0.78	0.46

S. No.	Institute	Funds released (amount in crores)	Funds utilised (amount in crores)
29.	International Centre for Theoretical Sciences, TIFR	0.92	0.54
30.	Indian Institute of Technology Roorkee	0.61	0.40
31.	Institute of Life Sciences	0.33	0.31
32.	Central University of Kerala	0.30	0.15
33.	Aryabhatta Research Institute of Observational Sciences (ARIES)	0.37	0.16
34.	National Institute of Oceanography, Goa	0.23	0.0
35.	Choudhary Charan Singh Haryana Agricultural University	0.15	0.15
36.	Centre for Nano and Soft matter sciences (CeNS)	0.20	0.05
37.	Bose Institute	0.20	0.17
38.	National Institute of Technology Calicut	0.18	0.0
39.	Jawaharlal Nehru Centre for Advanced Scientific Research, Bengaluru	0.60	0.40

(d) The details of the number of research projects initiated and successfully completed under this scheme, institute-wise:-

S. No.	Institute	No of projects initiated	No of projects completed
1.	Indian Institute of Technology Madras	17	15
2.	Indian Institute of Science	7	4

S. No.	Institute	No of projects initiated	No of projects completed
3.	Indian Institute of Technology Bombay	6	3
4.	Indian Institute of Technology Delhi	8	3
5.	National Centre for Biological Sciences	3	1
6.	Tata Institute of Fundamental Research, Mumbai	4	4
7.	Raman Research Institute, Bengaluru	2	2
8.	Indian Institute of Technology Kanpur	9	4
9.	Indian Institute of Technology, BHU	2	2
10.	Indian Institute of Technology, Gandhinagar	3	3
11.	Indian Institute of Technology, Hyderabad	4	1
12.	Indian Institute of Technology, Indore	4	4
13.	Indian Institute of Technology, Ropar	2	1
14.	Indian Statistical Institute, Bangalore	1	1
15.	Institute of Mathematical Sciences	1	1
16.	International Institute of Information Technology Hyderabad	1	1
17.	Cochin University of Science & Technology	1	1
18.	S N Bose National Centre for Basic Sciences, Kolkata	2	1

S. No.	Institute	No of projects initiated	No of projects completed
19.	Sree Chitra Tirunal Institute for Medical Sciences & Technology	1	1
20.	Indian Institute of Science Education and Research Pune	3	2
21.	Inter-University Accelerator Centre, New Delhi	2	1
22.	Indian Institute of Technology Roorkee	2	2
23.	Institute of Life Sciences	1	1
24.	Harish-Chandra Research Institute	1	1
25.	Aryabhata Research Institute of Observational Sciences (ARIES)	1	0
26.	Bose Institute, Kolkata	1	0
27.	CCS Haryana Agricultural University, Hissar	1	0
28.	Centre for Nano and Soft matter sciences (CeNS)	1	0
29.	Central University of Kerala	1	0
30.	National Institute of Oceanography, Goa	1	0
31.	Indian Institute of Technology Kharagpur	1	0
32.	Indian Institute of Technology, Bhubaneswar	1	0
33.	National Institute of Ocean Technology, Chennai	1	0
34.	Jawaharlal Nehru Centre for Advanced Scientific Research	1	0

S. No.	Institute	No of projects initiated	No of projects completed
35.	International Centre for Theoretical Sciences (ICTS), Bengaluru	1	0
36.	National Institute of Technology Calicut	1	0
37.	University of Delhi, South Campus	2	0
38.	Punjabi University	1	0
39.	NIT Silchar, Assam	2	0

(e) NIL.

(f) VAJRA Scheme has been conceptualized to bring an international dimension to the R&D ecosystem of India by leveraging overseas scientists' expertise to the Indian research framework and catalyzing potential institutional collaborations through faculty exchange. The state-wise details of patents, as available with the Department of Science and Technology (DST), are provided below:-

Patents Filed in India:
Punjab: 1. Singh, Malkeet, Singh, Harpreet, Berndt, Charles Christopher, (2018) "A Technology and Process for Coating a Substrate with Swarf Particles," Application No: 201811029355., Date of Filing: 03/August/2018. Request for Examination Filed: YES 2. Singh, Malkeet, Singh, Harpreet, Berndt, Charles Christopher, Sarkar, Prabir, (2019) "A Technology and Process for 3D Printing Using Swarf Particles," Application No: 201923001267., Date of Filing: 10/January/2019. Request for Examination Filed: YES

Uttar Pradesh:

(i) A process for making solid-state ion sensor for on-chip determination of potassium ion in body fluid. Indian Patent 201811041978;

(ii) A process for making microneedle-based transdermal biosensor involving polyethylenimine-modified Prussian blue-gold nanohybrids-enzyme ink for on-chip electrochemical biosensing in body fluid. Indian Patent 201811049930.

Odisha:

Patent application in preparation 'Development of an Infectious Clone for an Indian Strain of Chikungunya Virus'

Patent Filed in United States

1. Singh, Malkeet., Singh, Harpreet., Berndt, Charles Christopher., (2019) "A Technology and Process for Coating a Substrate with Swarf Particles," US Patent Application No. 16/352,331., Date of Filing: 13/March/2019. Request for Examination Filed: YES
